## **ShenandoahScience**





Fig. 1 - Tree-of-heaven is an invasive tree from Asia, introduced to this country for horticultural purposes in the late 1700s. Photo Courtesy/Chuck Bargeron, University of Georgia



Fig. 2 - Japanese stiltgrass is an annual species that invades forested areas. Originally from Asia, it is believed to have been accidentally introduced through use as packing material. Photo Courtesy/Chris Evans, University of Georgia



Fig. 3 - Volunteers removing garlic mustard in the Big Meadows area. NPS/James Åkerso

## Greener Isn't Always Good

Contrary to appearances, the stand of fast-growing trees above (fig. 1) and the lush grass on the forest floor below (fig. 2) are not signs of a healthy forest. These thriving plant species are invaders from other parts of the world. Here, free from the insects, fungi, and other organisms that feed upon, infect, and otherwise help keep these plants "in check" in their native habitats, they flourish. Their rampant growth and reproduction may displace native species and alter habitats for innumerable organisms not adapted to life with these aliens.

Park staff manage many of the most problematic of these invasive non-native species. Scientific surveys of exotic plants provide an understanding of where the "hot spots" are in relation to native species that may be at risk. The extent of the infestations of many of these species makes total eradication unrealistic (fig. 4). But by focusing efforts on priority areas and species in the early stages of invasion, much can be done to protect the resources of

Shenandoah National Park.

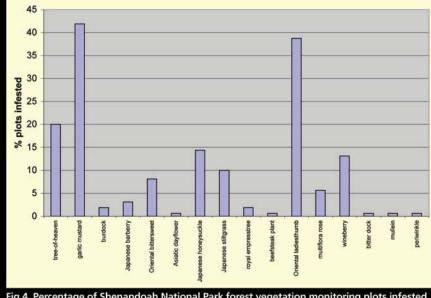


Fig 4. Percentage of Shenandoah National Park forest vegetation monitoring plots infested with various invasive non-native plant species. N = 160 plots.

**YOU CAN HELP!** Individual or group volunteer opportunities are available in non-native plant management (fig. 3). Visit www.nps.gov/shen for more information.